

ABSTRACT OF THE DISCLOSURE

A heat sealing/severing device for heat sealing thermoplastic films together. The device includes front and rear opposing jaws that are moveable between an open position and a closed position. The open position defines a zone for inserting the thermoplastic films between the front and rear jaws. In the closed position, the front and rear jaws are proximate each other to compress the thermoplastic films together. The rear jaw includes a resilient portion facing the front jaw. The heating element of the device may have a cross-sectional thickness no less than 0.55 times the cross-sectional thickness of the resilient portion. A front jaw release sheet (e.g., an unreinforced fluoroplastic) may be positioned between the insertion zone and the heating element. The front jaw release sheet may engage the heating element when the front and rear jaws are in the closed position and disengage from the heating element when the front and rear jaws are in the open position. The present heat sealer can form consistent heat seals with fewer leaks and is especially useful in sealing and severing relatively thin thermoplastic films.